UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,676	02/28/2002	Iris Ziegler	148/50932	2539

23911 7590 07/11/2007
CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
FUBARA, BLESSING M	

ART UNIT	PAPER NUMBER
1618	

MAIL DATE	DELIVERY MODE
07/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/084,676	ZIEGLER ET AL.	
	Examiner	Art Unit	
	Blessing M. Fubara	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17 and 38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Examiner acknowledges receipt of request reconsideration and terminal disclaimer filed 4/13/07. No claim is amended. Claims 17 and 38 presented 7/28/03 are the claims that are pending.

Previous rejections that are not reiterated herein are withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites a compound of tramadol-HCl and diclofenac-sodium. A compound in the chemical sense is defined by the fourth edition of the Hackh's Chemical Dictionary as "substance whose molecules consist of unlike atoms, and whose constituents cannot be separated by physical means." A compound "differs from a physical mixture by reason of the definite proportions of its constituent elements which depend on their atomic weights, by the disappearance of the properties of the constituent elements, and, by entirely new properties characteristic of the compound." In the instant case the individual compounds, tramadol and diclofenac appear to be present in the claimed compound as identifiable compounds; secondly

the formation of the claimed compound does not appear to involve the appearance of a new compound that is separate from the individual tramadol and diclofenac.

On page 8 of the remarks, applicant appears to be suggesting that the compound is a mixture of tramadol-HCl and diclofenac-sodium on page. Secondly, the formation of the compound in the application in Example 1 involves a physical mixture of the tramadol-HCl and the diclofenac-sodium, by moistening, granulating, moistening and/or granulating and drying under heat or pressure. Applicant's claimed compound thus reads on a physical mixture. Applicant serves as his/her own lexicographer and applicant defines a compound in terms of the properties and how it is physically mixed and formed in the specification (abstract, paragraphs [0002], [0009] and [0011], for example.

Claim 17 is thus examined as mixture of tramadol-HCl and diclofenac-sodium that meets applicants compound.

Response to Arguments

3. Applicant's arguments filed 4/13/07 have been fully considered but they are not persuasive.

Applicant argues that the issue ought not to be one of indefiniteness but one of enablement and that the 132-declaration shows a compound is formed.

Response:

While examiner may agree with applicant that an issue of enablement ought to have been raised, it is clear that the claims are so unclear that the issue of clarity of the claimed invention in claim 17 needed to be raised because a compound in the chemical sense is defined by the fourth

edition of the Hackh's Chemical Dictionary as "substance whose molecules consist of unlike atoms, and whose constituents cannot be separated by physical means." A compound "differs from a physical mixture by reason of the definite proportions of its constituent elements which depend on their atomic weights, by the disappearance of the properties of the constituent elements, and, by entirely new properties characteristic of the compound." In the instant case the individual compounds, tramadol and diclofenac appear to be present in the claimed compound as identifiable compounds; secondly the formation of the claimed compound does not appear to involve the appearance of a new compound that is separate from the individual tramadol and diclofenac. The 132-declaration does not resolve the issue because, in the declaration, the individual tramadol compound and diclofenac compound are released (see page 5).

It is unclear how in claim 17, the individual compounds of diclofenac and tramadol are released from a compound that comprises diclofenac and tramadol.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 17 remains rejected under 35 U.S.C. 102(e) as being anticipated by Mauskop (US 5,914,129).

Mauskop discloses magnesium containing analgesic oral composition for the treatment/alleviation of pain, and specifically migraine headache pain (abstract). Solid formulations of the composition are capsules, catchets or tablets and powder or granules; liquid formulations are solution or suspension in aqueous liquid or non-aqueous liquid and oil-in-water or water-in-oil emulsions', and solid formulation of tablet and capsules are preferred with tablet being the most preferred (column 6, lines 12-21). In a particular embodiment of Mauskop, the magnesium containing analgesic composition includes at least two different non-opioid analgesic agents, at least two different opioid analgesic agents or at least one non-opioid analgesic agent and at least one opioid analgesic agent and it is believed that a combination of non-opioid analgesic agents or opioid analgesic agents or a combination of non-opioid and opioid analgesic agents act synergistically to relieve pain (column 3, lines 47-54). In the case where the pharmaceutical composition comprises a combination of a non-opioid analgesic agent and an opioid analgesic agent (claim 6), the non-opioid analgesic agent of ibuprofen, naproxen and diclophenac (diclofenac sodium) are included in the list of non-opioid analgesic agents provided (claims 1-4, 6 and 15) and the opioid analgesic agents of tramadol is included in the list of opioid analgesic agents provided (claims 1, 4, 5, 6 and 17); specifically pharmaceutically acceptable salts such as the hydrochloride salt is employable (column 3, lines 10-14). Mauskop, in column 6, lines 18-31, discloses how the tablet is formulated. Mauskop discloses a combination of opioid analgesic and non-opioid analgesic to synergistically act to relieve pain (column 3, lines 47-54) and tramadol hydrochloride and diclofenac sodium are included in the list provided

(column 3, lines 1, 8 and 12). The property of a composition is not separable from the composition and how a composition is made has no patentable weight in a composition/product claim. Instant claim 17 reads on a composition, which is a mixture of diclofenac sodium and tramadol hydrochloride. The comprising language is open.

According to MPEP 2112.01 [R-2], "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. And "when the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Furthermore, each of the tramadol hydrochloride and the diclofenac sodium are compounds in themselves. Limitations from the specification cannot be read into the claims, (see In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)). The release of tramadol or diclofenac is a property of the composition or the compound. It is also noted that instant claim 17 does not recite specific amounts of the respective drugs in the composition that distinguishes the instant claim 17 from the disclosed composition of the prior art.

Response to Arguments

6. Applicant's arguments filed 4/13/07 have been fully considered but they are not persuasive.

Applicant states that Mauskop does not disclose a compound of tramadol hydrochloride and diclofenac sodium but a simple mixture of diclofenac sodium and tramadol hydrochloride and that claim 17 does not read on a simple mixture.

Response:

According to the specification, the formation of the compound in the application involves a physical mixture of the tramadol-HCl and the diclofenac-sodium, by moistening, granulating, moistening and/or granulating and drying under heat or pressure as in Example 1 so that the compound reads on a mixture of diclofenac sodium and tramadol hydrochloride. The same is true for Mauskop, which discloses a mixture of diclofenac sodium and tramadol hydrochloride. "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 38 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Mauskop (US 5,914,129).

Mauskop discloses a composition comprising tramadol and diclofenac and a method of preparing the composition. Mauskop in column 6, lines 11-31 discloses forming tablets by conventional method of compression and molding and specifically discloses that molded tablets can be optionally moistened with an inert liquid diluent. The instant method comprises a mixing of tramadol hydrochloride and diclofenac sodium, which the prior art discloses/suggests. The instant method comprises a moistening step which the prior art discloses. Repeating the mixing and moistening steps is an obvious variant of the method at the disposal of the person of ordinary skill in the art or to the skilled artisan whereby the steps are repeated as necessary for the production of the desired tablet. Mauskop does not specifically disclose formulating the mixture under energy input. However, compressing or granulating the mixture requires some form of energy input (see the eighteenth edition of Remington's Pharmaceutical Sciences, 1990, pages 1641- 1 647 as a teaching reference in the compression and granulation of pharmaceutical preparations). However, a method of making compositions are disclosed and taught in the eighteenth edition of Remington's Pharmaceutical Sciences. Remington specifically teaches wet-granulation method, fluid-bed granulation method, dry-granulation method, direct compression and related granulation processes (pages 1641-1647). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to formulate

10. the preparation of Mauskop by mixing and moistening the mixture as disclosed by Mauskop. One having ordinary skill in the art would have been motivated to apply the necessary energy to the mixture with the expectation of producing tablets.

Response to Arguments

11. Applicant's arguments filed 4/13/07 have been fully considered but they are not persuasive.

Applicant argues that the office action does not state the purpose of repeating the mixing and moistening steps or why a skilled artisan would go through the trouble and expense of to repeat those steps; that even if prima facie case is made, "the declaration" by Dr. Ziegler "shows that a tablet containing the compound of tramadol hydrochloride and diclofenac sodium has unexpectedly slower release profile compared to a tablet formed from a mixture of tramadol hydrochloride and diclofenac sodium produced according to Mauskop," and applicant refers to paragraph 5.1. (d)..

Response:

Regarding repeating the mixing and moistening steps, applicant has not demonstrated that the repeated nixing and moistening provides unexpected results. Repeating the mixing and moistening steps is an obvious variant of the method at the disposal of the person of ordinary skill in the art or to the skilled artisan whereby the steps are repeated as necessary for the production of the desired tablet.

Regarding the 1.132 declaration by DR. Ziegler

The declaration was addressed in the previous rejections of 02/07/07.

12. The declaration under 37 CFR 1.132 filed 12/15/2006 is insufficient to overcome the rejection of claims 17 and 38 based upon Mauskop (US 5,914,129) reference applied under 35 USC 102 and 103 as set forth in the last Office action because: the showing is not commensurate in scope with the claims. It refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. The method steps in 1(b) is not commensurate with the claimed method in claim 38. The exhibits are not commensurate with claim 38. The comprising language of the claim is open to the method steps Mauskop. In essence, the claimed method cannot exclude the method steps and the components of the composition and method of Mauskop. A consisting language may attempt to close the claimed composition and method from the composition and method of Mauskop.

The composition prepared on page 3 of the declaration is not commensurate with the claimed composition and also not with the composition in the specification because the compositions containing the tramadol hydrochloride and the diclofenac sodium are further enteric coated. Therefore, the process in the 1.132-declaration and the composition formed by the process in the 1.132 declaration is not commensurate with the claimed composition and process.

The declaration has been fully considered and the level of work that went into the declaration is acknowledged. However, as discussed above, the declaration is directed to

process of making the product in the application and not to method of claim 38 and the product of claim 17.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blessing M. Fubara whose telephone number is (571) 272-0594. The examiner can normally be reached on 7 a.m. to 5:30 p.m. (Monday to Thursday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Blessing Fubara
Patent Examiner
Tech. Center 1600

SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER